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BEFORE THE
POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

IN THE MATTER OF)
RAYMOND E. ANDERS,)
Appellant,)
v.)
STATE OF WASHINGTON,)
DEPARTMENT OF ECOLOGY,)
Respondent.)

PCHB No. 78-38

FINAL FINDINGS OF FACT,
CONCLUSIONS OF LAW
AND ORDER

Appellant challenges the validity of certain conditions which respondent, Department of Ecology, proposes to include in his permit to appropriate public waters. The matter came on for hearing before the Pollution Control Hearings Board, Dave J. Mooney, Chairman, and Chris Smith, Member, on June 30, 1978 in Ellensburg, Washington. Hearing examiner William A. Harrison presided. Respondent elected a forral hearing pursuant to RCW 43.21B.230.

Appellant Raymond E. Anders appeared pro se. Respondent Department of Ecology appeared by and through its attorney, Robert E.

1 Mack, Assistant Attorney General. Seattle reporter Kathie Brodie
2 recorded the proceedings.

3 Witnesses were sworn and testified. Exhibits were examined.
4 Having heard the testimony and examined the exhibits, and being fully
5 advised, the Pollution Control Hearings Board makes these

6 FINDINGS OF FACT

7 I

8 Appellant, Raymond E. Anders, owns 200 acres of land along the
9 Methow River in Okanogan County (Sec. 19, T.30 N., R. 23 E.W.M.). Of
10 these, he farms 30 acres, and this is devoted to apple orchard. Appellant
11 purchased the land in 1974 and obtained with it the right to irrigate
12 by withdrawals from Black Canyon Creek. Black Canyon Creek was
13 adjudicated by Okanogan County Superior Court in 1929. (See RCW 90.03.110
14 through .240 setting forth procedure for this type of adjudication).
15 The water right in Black Canyon Creek which appellant acquired is among
16 those dealt with in that adjudication. In drought periods water may
17 not be available from Black Canyon Creek in sufficient quantity to
18 irrigate appellant's land.

19 II

20 Seeking a supplemental water supply for his irrigation, appellant
21 applied to Department of Ecology for a permit to withdraw ground water
22 on July 7, 1977. The well for this withdrawal is presently in existence,
23 and is located on a bench above the Methow River about 40 horizontal
24 feet from the river's edge. The appellant selected this location
25 because he anticipated, correctly, that the underground water-rich
26 alluvial deposits would be deepest at close proximity to the river.

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1 III

2 After receipt of appellant's application for a ground water
3 withdrawal permit, Department of Ecology conducted an examination
4 consisting of: 1) a field inspection of the well and its surroundings
5 and 2) application of the "Theis" equation to the appellant's well.
6 Through this examination Department of Ecology concluded that at least
7 95% of water withdrawn from appellant's well, within one day of pumping,
8 would be river water.

9 Department of Ecology reached this determination by use of the
10 mathematical "Theis" equation because the absolute quantity of water
11 diverted through appellant's well is too small to measure by recording
12 the river's rate of flow above and below the appellant's well. Neither
13 is there any practical means available to Department of Ecology for
14 actually tracing water from the river to appellant's well. The
15 "Theis" equation, however, is a method, generally recognized in hydrology,
16 for calculating the percentage of well withdrawal which is diverted
17 from a nearby river when basic data concerning the area geology are
18 known.

19 IV

20 The Report of Examination published by Department of Ecology,
21 in response to the appellant's ground water application, recommended
22 that a permit be granted but imposed conditions linking withdrawals
23 from the well to a "base flow" in the Methow River. Specifically,
24 the following conditions, pertinent to this appeal, were set forth
25 in the Report of Examination:

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1 Due to the proximity of this well to the Methow River
2 and the resulting hydraulic continuity, the following
3 provisions of the Methow River Basin Management Plan
4 shall apply.

5 'This authorization is subject to the provisions of
6 Chapter 173-548 WAC as adopted in Olympia, Washington,
7 January 27, 1977, and the general rules of the Department
8 of Ecology as specified under Chapter 173-500 WAC and others.

9 Base flows as established at monitoring station 12.4499.50
10 at river mile 6.7, Sec. 20, T. 30 N., R. 23 E.W.M. and as
11 presented in the table below shall be maintained by
12 regulation of diversions including this one as set forth
13 in said WAC 173-548.

14 Base flow hydrographs pages 49 and 50 in the document
15 entitled 'Water Resources Management Program in the
16 Methow River Basin,' dated October, 1976, shall be used
17 for definition of base flows on those days not specifically
18 identified in WAC 173-548. Base flows at Station 12.4499.50.

19	Month	Day	Base Flow (cfs)	Month	Day	Base Flow (cfs)
20	April	15	860	July	15	800
21	May	1	1300	August	1	480
22	May	15	1940	August	15	300
23	June	1	2220	September	1	300
24	June	15	2220	September	15	300
25	July	1	2150	October	1	360

26 No diversion of water under this authorization shall
27 take place when the flow of the river falls below the
28 above flows.'

29 Based on analysis of water availability for this location
30 on the Lower Methow River, it appears that a firm supply
31 (defined as that flow level at which the base flows are
32 exceeded 9 out of every 10 years) will not be available
33 during the months of April, August, and September.

34 Therefore, water shortages and regulations should be
35 expected at least one year out of 10, but probably
36 more often, during the above designated months.

37 Consequently, the holder of this water right is advised that
38 cropping patterns should be developed and arranged so that
39 in the event regulation of water use during these months
40 is required, a major or long-term detrimental effect on
41 the crop would not result.

42

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1 This Report of Examination was communicated to appellant along with
2 Department of Ecology's statement that it constituted an appealable
3 determination.

4 Appellant appeals from the conditions linking his permit for
5 ground water to base flows in the Methow River. He contends that
6 there has been no actual measurement of continuity between his well
7 and the river, that base flows designed to protect the river therefore
8 should have no application to his well and that such linkage of his
9 well to the river would deprive him of ground water at the very times
10 it is most needed, namely, when river flows are lowest.

11 V

12 Any Conclusion of Law which should be deemed a Finding of Fact
13 is hereby adopted as such.

14 From these Findings, the Pollution Control Hearings Board comes
15 to these

16 CONCLUSIONS OF LAW

17 I

18 In 1971 the Legislature enacted the Water Resources Act,
19 90.54 RCW, and this language is found in that Act:

20 Utilization and management of the waters of the state
21 shall be guided by the following declaration of
22 fundamentals: . . .

23 (3) The quality of the natural environment shall be
24 protected and, where possible, enhanced as follows:

25 (a) Perennial rivers and streams of the state
26 shall be retained with base flows necessary to
27 provide for preservation of wildlife, fish, scenic,
aesthetic and other environmental values, and
navigational values RCW 90.54.020(3) (a).

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1 Within the same Act, at RCW 90.54.040(1), the Legislature directed
2 that the Department of Ecology develop and implement a state water
3 resources program in accordance with the policies of that Act. Using
4 its authority to develop such a program in segments, the Department
5 adopted, in January, 1977, a water resources program for the Methow
6 River Basin. This is set out in chapter 173-548 WAC, and was developed
7 with the aid of considerable public comment and guidance. This water
8 resources program establishes specific base flows in the Methow River
9 near appellant's well for the statutory purpose of preserving wildlife,
10 fish, scenic and other values. WAC 173-548-020. See also WAC 173-500-050(

11 II

12 In carrying out its statutory charge that "Perennial rivers and
13 streams of the state shall be retained with base flows . . .",
14 RCW 90.54.020(3)(a), supra, the Department of Ecology is not confined
15 by the Water Resources Act to regulating only surface water withdrawals.
16 Rather, ground water withdrawals may logically be regulated also if
17 it serves the purpose of keeping a river's base flow intact. Department
18 of Ecology therefore adopted this rule in the Methow River Basin
19 water management program:

20 WAC 173-548-060 GROUND WATER. If it is determined
21 that a future development of ground water measurably
22 affects surface waters subject to the provisions of
23 chapter 173-548 WAC, then rights to said ground water
shall be subject to the same conditions as affected
surface waters.

24 In interpreting the above rule we will give effect to Exhibit
25 R-11 which is a publication of the Department of Ecology that antedates
26 the adoption of the Methow River Basin program, chapter 173-548 WAC.

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1 is entitled "Water Resources Management Program, Methow River Basin"
2 and is dated December, 1976. The publication states:

3 This document sets forth certain State management policies
4 on water resources in the Methow River Basin. It is intended
5 to provide a basis for making decisions on future water
6 resource allocation and use. (P. 11).
7

8 The Department of Ecology's existing policy is to treat
9 ground water, in measurable continuity with surface water,
10 as being subject to the same criteria as surface water
11 allocations. The proposed Methow River Basin Water
12 Resources Management Program would not change this
13 policy. (Emphasis added). (P. 7).

14 We therefore conclude that appellant's development of ground water
15 "affects" surface waters (WAC 173-548-060, supra) where there is
16 "measurable continuity" between the two. We further conclude that
17 use of the "Theis" or similar equation is a permissible means of
18 measuring continuity on the facts of this appeal. Such measurement
19 having shown "95%" continuity between appellant's ground water development
20 and the Methow River, we conclude that appellant's right to withdraw
21 ground water was properly subjected to the same conditions as would
22 be applied to surface water withdrawals and which have as their aim
23 the preservation of base flows in the Methow River.

24 III

25 Appellant's right to withdraw ground water may be curtailed in
26 times of water shortage. In this, there is no difference between
27 his right and all other water rights ever granted by the state.
28 Unlike water rights pre-dating or not governed by the Water Resource
29 Management Programs adopted under chapter 90.54 RCW, a water shortage
30 justifying curtailment of appellant's ground water right will be defined

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1 by reference to the established base flows necessary to protect the
2 Methow River and its fish and wildlife. RCW 90.54.020(3)(a) and .900 and
3 WAC 173-548-020 and -070. Despite this, diminishment of the Methow to its
4 base flow does not automatically mandate curtailment of withdrawals under
5 all "base flow permits" such as appellant would have. Rather, curtailment
6 must proceed in an orderly fashion cognizant of the priority of each
7 "base flow permit". WAC 173-548-040. Hence, the river must fall
8 far enough below its base flow to justify curtailment of holders of
9 "base flow permits" junior in priority to appellant's before appellant's
10 withdrawals may be curtailed. For this reason, the wording in the
11 Report of Examination: "No diversion of water under this authorization
12 shall take place when the flow of the river falls below the above flows"
13 is applicable only to the lowest priority "base flow permit". The
14 appellant should inquire of the Department of Ecology as to the specific
15 likelihood of curtailment given the specific priority which would
16 pertain to his ground water right. This likelihood of curtailment
17 may be different from the "one year out of ten" predicted in the
18 Report of Examination. Such predictions, of course, are just that and
19 are not legally binding upon the Department of Ecology should nature
20 deviate.

21 IV

22 Appellant has not established any water right based upon
23 historical withdrawals directly from the Methow River.

24 V

25 Any Finding of Fact which should be deemed a Conclusion of Law
26 is hereby adopted as such.

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1 From these Conclusions, the Board enters this

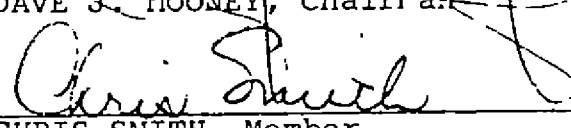
2 ORDER

3 The determination of the Department of Ecology that appellant's
4 ground water permit should issue only with the conditions set forth
5 in its Report of Examination is hereby affirmed.

6 DONE at Lacey, Washington, this 18th day of August, 1978.

7 POLLUTION CONTROL HEARINGS BOARD

8 
9 DAVE J. MOONEY, Chairman

10 
11 CHRIS SMITH, Member

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